

**DELTA STEWARDSHIP COUNCIL
DELTA PLAN INTERAGENCY IMPLEMENTATION COMMITTEE
Nov 14, 2016
Sacramento Convention Center
1400 J St, Room 202, Sacramento
MEETING SUMMARY**

The Delta Stewardship Council (Council) established the Delta Plan Interagency Implementation Committee (DPIIC) after adoption of the Delta Plan in 2013 and continues to coordinate and oversee DPIIC activities as required by the Delta Reform Act. The sixth DPIIC meeting took place on Monday, Nov 14, 2016 and was called to order by Chair Randy Fiorini.

Attendees

The following were in attendance (alphabetical):

Michelle Banonis, Area Manager, Bay-Delta Office, US Bureau of Reclamation (Reclamation) *(for David Murillo - Regional Director, Mid-Pacific Division)*
Chuck Bonham - Director, California Department of Fish and Wildlife (DFW)
Gordon Burns, Undersecretary, California Environmental Protection Agency (CalEPA) *(for Matt Rodriguez, Secretary)*
Mark Cowin - Director, California Department of Water Resources (DWR)
Dr. Cliff Dahm - Lead Scientist, Delta Stewardship Council (Council)
Bill Edgar - President, Central Valley Flood Protection Board (Flood Board)
Randy Fiorini – Chair, Council and DPIIC
Campbell Ingram - Executive Officer, Sacramento San Joaquin Delta Conservancy (Conservancy)
Felicia Marcus - Chair, State Water Resources Control Board (Water Board)
Karla Nemeth - Deputy Secretary for Water Policy, California Natural Resources Agency (Resources) *(for Secretary John Laird)*
Mary Piepho - Chair, Delta Protection Commission (DPC)
Maria Rea - Assistant Regional Administrator, National Oceanic and Atmospheric Administration (NOAA) Fisheries, West Coast Region *(for West Coast Regional Administrator Barry Thom)*
Karen Ross - Secretary, California Department of Food and Agriculture (CDFA)
Mark Sogge - Pacific Regional Director, US Geological Survey (USGS)
Paul Souza - Regional Director, US Fish and Wildlife Service (USFWS)
Tomas Torres – Water Division Director, US EPA Region 9 *(substituted by Erin Foresman - Policy Coordinator, for a portion of the meeting)*

In addition to those listed above, various experts and managers presented to the Committee (in order of appearance):

Jessica Law, DPIIC Coordinator, Council
Mike Chotkowski, Delta Science Coordinator, USGS
Darcy Austin, Council, Delta Science Program
Michael Healey, University of British Columbia
Letitia Grenier, San Francisco Estuary Institute
Carl Wilcox, DFW
David Okita, Director of Delta Restoration, Resources
Kris Tjernell, Special Assistant on Water Policy, Resources

Overview and Introductions

Chair Fiorini provided an overview of the agenda, noting that the focus of the meeting will be on outcomes from the Science Enterprise Workshop, linking best-available science from *The State of the Bay-Delta Science* publications to decision-makers, and an update on ecosystem restoration progress. Specifically, the meeting agenda included presentations and committee discussion on:

- The Science Enterprise Workshop: Supporting and Implementing Collaborative Science
- Linking Best-Available Science and Decision Making
- Ecosystem Restoration Progress Update

DPIIC participants introduced themselves and noted a few current areas of interest from their respective agencies. Dr. Dahm noted that the two reports (1) *State of Bay-Delta Science 2016 (SBDS)* summary report for policymakers, *The Delta on Fast Forward: Thinking beyond the Next Crisis*¹ distills key findings and presents new perspectives for managing the Delta, and (2) *A Delta Renewed: A Guide to Science-Based Ecological Restoration in the Sacramento-San Joaquin Delta*² – provide important information for DPIIC members. In addition, the upcoming Biennial Bay-Delta Science Conference³ will provide a rich forum for presenting technical analyses and results relevant to the DPIIC's mission. With respect to integrated modeling, Dr. Dahm noted that a summary of the *Integrated Environmental Modeling of Estuarine Systems: Outcomes of the 2015 UC Davis Workshop*⁴ will be coming out shortly. Dr. Dahm also noted that with the passage of AB-1755 The Open and Transparent Water Data Act,⁵ there is now regulatory support for implementing some of the concepts envisioned by the report - *Enhancing the Vision for Managing California's Environmental Information*.⁶

Beginning with Ms. Banonis, many DPIIC members noted interest in hearing and discussing the outcomes and recommendations from the recent Science Enterprise Workshop. Ms. Banonis noted that planning for water year 2017 is now under way at Reclamation. Ms. Piepho noted that DPC is working on the Delta Flood Risk Feasibility Study and expect that it will be released in January 2017. Mr. Cowin emphasized challenges in planning for water year 2017, and that interagency collaboration is key for managing the range of situations that could encountered going forward. Mr. Edgar called attention to the challenges that were encountered between regional and local interests during the 2017 Central Valley Flood Protection Plan Update, as well as some successes that have come out of that process. In particular, the Advisory Committee that was convened to support the 2017 Flood Plan Update has released a report, *Conservation Strategy Advisory Committee Draft Recommendations*⁷ that touches on permitting and stakeholder collaboration that could result in large-scale permitting efforts to maximize benefits (regional, inter-regional, and system-wide).

Ms. Rea noted that the new NOAA Fisheries West Coast Regional Administrator Barry Thom was in attendance for part of the proceedings and welcomed him to the discussion. Ms. Rea highlighted the successful partnership of NOAA and Reclamation in maintaining temperatures from the Shasta Reservoir for winter-run Chinook during the summer of 2016 through the use of new scientific tools, an improved understanding of temperature tolerances, and adaptive management. Ms. Rea also highlighted the Collaborative Science and Adaptive

¹ *The Delta on Fast Forward: Thinking beyond the Next Crisis*. <http://deltacouncil.ca.gov/docs/delta-fast-forward-thinking-beyond-next-crisis>

² *A Delta Renewed: A Guide to Science-Based Ecological Restoration in the Sacramento-San Joaquin Delta*. <http://www.sfei.org/documents/delta-renewed-guide-science-based-ecological-restoration-sacramento-san-joaquin-delta>

³ Biennial Bay-Delta Science Conference. <http://scienceconf2016.deltacouncil.ca.gov/>

⁴ *Integrated Environmental Modeling of Estuarine Systems: Outcomes of the 2015 UC Davis Workshop*.

https://watershed.ucdavis.edu/files/content/files/NSF_Report_Integrated%20Modeling%20for%20Adaptive%20Management_20160229.pdf

⁵ AB-1755 The Open and Transparent Water Data Act. https://leginfo.ca.gov/faces/billTextClient.xhtml?bill_id=201520160AB1755

⁶ *Enhancing the Vision for Managing California's Environmental Information*. <http://deltacouncil.ca.gov/docs/enhancing-vision-managing-california-s-environmental-information-final>

⁷ 2017 Central Valley Flood Protection Plan Update – Conservation Strategy Advisory Committee Draft Recommendations. <http://cvfpcb.ca.gov/news/2017-central-valley-flood-protection-plan-update-conservation-strategy-advisory-committee-draft-recommendations>

Management Program (CSAMP) as a successful collaboration focused on the Biological Opinions – and from that, the Salmon Scoping team’s efforts in release of a final report and subsequent steps to work through prioritization actions. Mr. Sogge noted that the San Francisco Bay-Delta is one of two-dozen systems that will be highlighted for the incoming federal administration. Mr. Burns and Ms. Marcus noted the progress that is underway by several State agencies in meeting Executive Order B-37-16 which directs five State agencies to establish a long-term water conservation framework. The resulting actions and implementation will help to achieve a top priority in the Governor’s California Water Action Plan – to “Make Conservation a California Way of Life” (joint improvement report will be released shortly). Ms. Marcus noted the roll out of the draft *Phase 1: Bay-Delta Plan Update - San Joaquin River Flows and Southern Delta Water Quality Objectives*.⁸ Ms. Marcus also noted that the Evidentiary Hearings for the Water Right Petition by California WaterFix is ongoing. Chair Fiorini identified successes that the Council has had in developing the Delta Levee Investment Strategy, supporting the Delta Conservation Framework, working with State agencies in certifying Covered Actions, and the launch of DeltaView (<http://deltacouncil.ca.gov/delta-view>) - a unified system that assimilates data on projects and funding in the Delta.

The Science Enterprise Workshop: Supporting and Implementing Collaborative Science

Chair Fiorini welcomed Ms. Law and Mr. Chotkowski as co-chairs of the Planning Committee that organized the recent Science Enterprise Workshop. Ms. Law and Mr. Chotkowski provided a presentation on the proceedings and outcomes from the event, held November 1-2, 2016, at the University of California, Davis.

The Workshop featured science leaders and science policy experts from several nationally prominent systems to discuss the conduct of science in their regions, including both their own programs and others: Florida Everglades, Chesapeake Bay and watershed, Great Lakes, Coastal Louisiana, Puget Sound, and the California Bay-Delta. The science enterprises in these six systems tend to be large and complex – and the speakers used a set of common points of comparison including program history, major issues, current structure, science funding, important tools, communication, and co-production. On Day 2, the workshop featured a series of panel discussions to get more in depth on four key topics: science strategies in large programs, governance and adaptive management, funding and resource allocation, and legitimacy, co-production, and communication. In particular, knowledgeable social scientists were invited to comment on how science is conducted.

About one-hundred and eighty-five participants attended the workshop, many from State and federal agencies, as well as the broader nongovernmental, academic, water, consulting, and environmental community. According to a survey that was circulated after the workshop, 89 percent found the workshop to be very relevant to their work and 79 percent thought there were definitely lessons learned from other systems relevant for the California Bay-Delta. Ms. Law and Mr. Chotkowski noted that they heard a lot of good ideas at the workshop. Many participants commented that it was a very useful forum to exchange ideas with other major aquatic ecosystem programs, and that there was a tremendous amount of conversation and ideas exchanged.

In terms of what might be useful for the California Bay-Delta – survey respondents were asked to indicate the level of importance on a list of nine key components for the California Bay Delta system; survey respondents ranked all of the lessons learned as “important” to “very-important”.

More broadly, Ms. Law noted that there are several ongoing efforts in the Delta that are in line with many of the workshop recommendations, such as the Science Action Agenda, as a strategy for organizing research priorities; adaptive management frameworks for water operations and ecosystem restoration; Delta Independent Science Board review of the Monitoring Enterprise, and implementation of AB 1755 The Open and Transparent Water Data Act. DPIIC workgroups, and Council meetings are good forums to continue to discuss and track

⁸ Phase 1: Bay-Delta Plan Update - San Joaquin River Flows and Southern Delta Water Quality Objectives and Program of Implementation. http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/bay_delta_plan/water_quality_control_planning/

implementation of the Delta Science Strategy, and where applicable, could be improved by information coming out of the workshop.

Chair Fiorini thanked Ms. Law and Mr. Chotkowski for the presentation and solicited feedback from DPIIC members regarding the highest priorities. Mr. Cowin raised the question of what is meant by integrated models – how does it relate to existing models, time-frames, and usefulness. Mr. Chotkowski noted that while there are many hydrological models and biological models, they are not necessarily linked nor do they incorporate climate change to provide useable forecasts. Dr. Dahm provided three examples of successful integrated modeling efforts from the workshop: (1) Coastal Louisiana: Projected land-loss in Louisiana helped mobilize collective modeling effort to understand how and where to direct sediment and water on the coast – meant that needed to combine engineering, sediment transport, hydrodynamic, and oceanic models in order to evaluate different management actions. Modelers from the private sector, state and federal agencies, and universities came together for about 18 months in order to integrate efforts in understanding where best to focus protection and restoration efforts. (2) Everglades: For water quality and invasive species – integrated modeling effort sought to link hydrological models to the biogeochemical processes taking place in order to then design structures to mitigate excess nutrient loading coming from the north. (3) Chesapeake Bay: Efforts first sought to get a good representation of hydrodynamics in the bay, and then linked it to the sediment sources in the upper watersheds. Required collaboration across seven states and multiple state and federal agencies. Each of these examples provide successful case-studies of how groups can work together.

Mr. Souza cautioned that modeling can be extraordinarily helpful, or not. Before any decisions are made that would require staff time and investigations, need to have leadership engaged and agreement on process and outcomes. Ms. Banonis suggested that this could be a two-step process – first agreeing on shared outcomes, and then secondly, bring together the technical staff to identify specific integration actions. Chair Fiorini suggested that there could be a workgroup that would come back in April 2017 with set of specific actions. Ms. Piepho emphasized the importance of integrating science efforts in the Bay and Delta as one enterprise. Ms. Rae commented that she supports taking a fresh look at modeling abilities and forecasting and linking hydrodynamic and biological models with useable outputs. Mr. Sogge emphasized the value of integrating efforts across agencies and other stakeholders.

Chair Fiorini asked DPIIC members to indicate level of interest in committing resources to support integrated modeling. Ms. Marcus suggested that it will be important to understand the cost-benefits of engaging prior to committing dedicated staff time; Mr. Cowin agreed – that the overall goal of integrated modeling is good, and proposed that initial steps bring cross-agency staff together who have policy responsibilities in order to provide guidance on usefulness. Each agency has unique interests and protocols, and this will have to be overcome if hope to collectively utilize modeling outputs. Mr. Bonham suggested that a more specific proposal be formed and brought back to DPIIC members that articulates workload, boundaries, and themes – this will help members be able to make a more informed decision. A two-page memo would be helpful and circulation of this product should not wait until the next time DPIIC meets. Chair Fiorini agreed and concluded that members need a tighter proposal with well-defined deliverables for DPIIC members to respond to.

Given the broader set of recommendations, Chair Fiorini asked DPIIC members what product would be useful to receive. Ms. Law stated that she expects to be able to complete a draft *Science Enterprise Workshop Outcomes Report* by the end of the year for DPIIC members and respective staff to react to; there are many options for how to approach the recommendations - for example a joint funding proposal could take many forms, and will need member guidance in the direction the recommendations will take. Ms. Banonis stated that she liked the competitive science funding process – but will need to think carefully about how it would integrate with existing processes like the Interagency Ecological Program (IEP), CSAMP, and individual efforts. Mr. Sogge emphasized his support for the integration of social sciences within work. Ms. Marcus highlighted value of improved communication between science and policy. Mr. Torres concurred, and as an example, noted that *The 2016 San*

*Francisco Estuary Blueprint*⁹ does in fact include both the Bay and Delta. Mr. Souza noted the value of periodically reviewing scientific investments and evaluating the research questions as they relate to policy decisions.

Mr. Cowin proposed that the key Science Enterprise Workshops recommendations should be adopted by DPIIC member agencies as the guiding principles for how the DPIIC member agencies operate. Ms. Piepho agreed, and highlighted the utility of designation of the Delta as a National Heritage site for federal recognition. General agreement that the key recommendations should be adopted as guiding principles for DPIIC member agencies, and that a more detailed Outcomes Report with DPIIC member agency input should be completed with specific agency actions. Dr. Dahm highlighted importance of designating a champion to ensure the implementation of recommendations.

Linking Best-Available Science and Decision Making

Chair Fiorini welcomed Ms. Austin, Mr. Healey, Ms. Grenier, and Mr. Wilcox to discuss current scientific knowledge of the Bay-Delta ecosystem as captured in two new reports: *State of Bay Delta Science 2016 (SBDS)* and *Delta Renewed: A Guide to Science-Based Ecological Restoration in the Sacramento-San Joaquin Delta (Delta Renewed)*. As the lead organizer of *SBDS 2016*, Ms. Austin highlighted that the publications represent the contributions of fifty authors guided by an Editorial Board including Michael Healey, Michael Dettinger, and Richard Norgaard. Fifteen chapters are being published in the peer-review journal, *San Francisco Estuary & Watershed Science*. Of particular relevance for DPIIC members, a summary report *The Delta on Fast Forward: Thinking Beyond the Next Crisis* - distills key findings in *SBDS, 2016* for a policymaker audience. It includes seven new perspectives, a suite of tools that are advancing Delta science, and eight priority actions that are take-home messages.

Mr. Wilcox provided some background on the recently released report, *A Delta Renewed*, which is the third of three landmark Delta science studies from San Francisco Estuary Institute (SFEI). The report was prepared in cooperation with State agencies including the Council, Conservancy, and DFW. Ms. Grenier provided an orientation to the report and the scientific guidance it provides on how the Delta used to function, how it has changed, and a holistic approach to restore the Delta's ecological systems and native wildlife. Ms. Grenier highlighted the emphasis on efficient restoration – the idea of taking the least amount of land and water to support wildlife and food webs, while retaining agriculture and critical water supply functions.

Ecosystem Restoration Progress Update

Chair Fiorini invited Mr. Wilcox to present on the Delta Conservation Framework, and Mr. Wilcox walked through highlights of the framework's long-term vision, purpose, principles, and how it fits in with other strategies, existing plans, related actions, and funding efforts. DFW is mid-way through a stakeholder engagement process that involves a series of workshops which will continue through December and into the spring of 2017.

Mr. Okita then provided an overview of California EcoRestore and discussed progress made to date. Mr. Tjernell provided an update on three restoration projects that demonstrate successful interagency coordination; Wallace Weir Fish Rescue Facility, Fremont Weir Adult Fish Passage, and Yolo Bypass Floodplain Restoration. These projects demonstrate successful interagency collaboration that must be rapidly accelerated in order to meet EcoRestore targets.

Mr. Ingram provided an update on the Regional Conservation Strategies; the Cache Slough Regional Restoration effort has begun, and seeking to optimize restoration for the greatest amount of ecological functionality while conserving agricultural land-use through state, federal, local agency participation, stakeholders, and consultants.

⁹ The 2016 San Francisco Estuary Blueprint. <http://www.sfestuary.org/ccmp/>

Delta Plan Interagency Implementation Committee, Meeting Summary (Nov 14, 2016)

The effort is benefiting from the Delta Conservation Framework, A Delta Renewed, base information, and local voices to identify best opportunities for specific restoration sites.

To provide an update on restoration funding, Mr. Ingram noted that the first round of grant solicitation from Prop 1 funds have been distributed for \$6.3 million for nine projects. Currently, the Conservancy is in the middle of the second round; the Conservancy Board will review eleven proposals requesting \$15 million for next year.

To complement the Conservancy restoration efforts, Mr. Okita provided a Project Tracking Matrix for DPIIC members to review. The Matrix currently shows four projects, and Mr. Okita expects to expand this matrix to include additional projects (about ten to fifteen) by December 2016 that need accelerated agency support. Mr. Bonham emphasized the urgency for DPIIC members to apply collective support for these projects and proposed that each agency review the Matrix and identify the barriers and management actions to accelerate project permitting and implementation. The Brown Administration has clearly defined a timeline, and Ms. Nemeth agreed that collectively, DPIIC members and staff are energized and mobilized to advance project implementation.

Chair Fiorini concluded that by the next DPIIC meeting on April 17, 2017 – DPIIC Members will return with clear steps identified by agency to support the projects identified in the Matrix. Ms. Marcus indicated deep support for project implementation, Ms. Ross noted that it would be worthwhile to reach out to the USDA Natural Resources Conservation Service to both leverage cost-share funds and resources on wildlife friendly farming. Ms. Foresman called attention to USEPA Region 9 interest in having a Regional General Monitoring Program for wetlands in the San Francisco Bay, and that they expect to include restoration projects and are exploring ways to streamline the permitting process in such a way that monitoring and assessment occurs throughout. Ms. Foresman noted that the program could serve as a model for activities in the Delta especially as it relates to NEPA and CWA 404 permits.

Committee Business

Chair Fiorini concluded the meeting with appreciation to presenters. There were no public comments.

Key Outcomes

- **Integrated Modeling Proposal:** Develop 2-Page Memo proposal for Integration Modeling with interagency input prior to next DPIIC meeting.
- **Science Enterprise Workshop Outcomes Report and Recommendations Adoption:** DPIIC Member Agencies will adopt the recommendations from the Science Enterprise Workshop as guiding principles for DPIIC member agencies, and a more detailed Outcomes Report with DPIIC member agency input will be completed in early 2017 that identifies specific actions. Recommendations include the following:
 1. Clear leadership and decision making structure with responsibility at the highest level
 2. Clear communication on importance of scientific findings
 3. More integration between the Bay (lower estuary) and Delta (upper estuary)
 4. Integration of social sciences
 5. Integrated modeling and forecasting
 6. More focus on climate change impacts on the Delta
 7. Competitive science funding to attract best and brightest
 8. Willingness to do adaptive management
 9. Peer-review, or over-the-shoulder review process
- **Review Project Tracking Matrix:** By the next DPIIC meeting on April 17, 2017, DPIIC member agencies will review the Project Tracking Matrix and identify the specific management actions each agency can take that will accelerate project implementation.

Delta Plan Interagency Implementation Committee, Meeting Summary (Nov 14, 2016)

- **DeltaView Review** (<http://deltacouncil.ca.gov/delta-view>): DPIIC member agencies should begin continual review and update records in the system for improved reporting.

The webcast for the meeting can be found here: <http://www.cal-span.org/cgi-bin/media.pl?folder=DSC>

The presentations for the meeting can be found here: <http://deltacouncil.ca.gov/event-detail/13338>

Next Meeting: Monday, April 17, 2017, 1-5 pm, at the Sheraton Grand Sacramento Hotel, 1230 J Street, Sacramento, CA.